Transforming Reserve Officers' Training Corps for Tomorrow's Officer

by

Colonel Troy L. Douglas United States Army



United States Army War College Class of 2013

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USAWC STRATEGY RESEARCH PROJECT

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Colonel Troy L. Douglas United States Army

Colonel Charles W. Patnaude
Department of Command, Leadership, and Management
Project Adviser

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Abstract

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The drawdown in Afghanistan will soon begin and the U.S. military will find itself in an uncertain training situation. With no true peer competitor and a changing global security environment, it is not clear when and where conventional Army forces will deploy next.

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Transforming Reserve Officers' Training Corps for Tomorrow's Officer

Military leadership is the sum of those qualities of intellect, human understanding, and moral character that enable a person to inspire and to control a group of people successfully.

—Major General John A. Lejeune¹

In August 2012, the Army released its updated leadership manual, Army Doctrine Publication 6-22 (ADP 6-22), *Army Leadership*. This document and its supporting reference manual, Army Doctrine Reference Publication 6-22 changes leadership priorities established for the past 20 years. This change refocuses the Army to the human side of leadership. Dating back before Sun Tzu, scholars of war have recognized that leadership is the driving factor that wins war. The ability for leaders at all levels to react faster and make sound decisions quicker than their adversaries win wars. Recent conflicts in Iraq and Afghanistan have shown leadership at the small unit or tactical level has strategic ramifications. General David H. Petraeus's acknowledgment in late 2006 indicated that harsh U.S. tactics have alienated Iraqi civilians and undermined Operation Iraqi Freedom.² Small unit leadership failures at places like Abu Ghraib and the March 2012 slaying of 16 Afghan civilians by Staff Sgt. Robert Bales received global media coverage. These incidents highlight how poor judgment at the small unit level, magnified by the global media, can affect world opinion.

Army Leadership says the Army will transition to conducting decentralized operations in an increasingly complex and uncertain environment.³ To complete this transition successfully, leaders must be prepared to operate in a whole host of geographical locations and against unpredictable scenarios. Due to the looming uncertainties of these operations and how quickly a unit has to respond in support of them, less time is available for new officers to train and gain experience before leaving

their posts, camps, or stations. To assist with shortening this gap, Reserve Officers'

Training Corps (ROTC) programs will need to prepare future officers with a greater depth of understanding in leadership than previously required. This solution introduces cadets to training that will build a greater baseline of awareness of their future environment and prepare them for successful leadership to aid in executing their duties. Furthermore, it will require ROTC programs to teach a clear understanding of ambiguous doctrine, in an adaptive learning environment that promotes critical thinking, and builds a comprehensive acceptance of mission command. The ROTC precommissioning phase must address these three fundamental things so officers can continue to mature throughout their future careers.

ROTC as a pre-commissioning institution provides more than 60% of the second lieutenants who join the active Army, the Army National Guard and the U.S. Army Reserve force. Today, ROTC is offered at more than 273 colleges and universities across the United States, to include the District of Columbia and Puerto Rico.⁴ In 2012, more than 41% of the Army's active duty General Officers received their commissions through ROTC.⁵ The other two pre-commissioning institutions, the United States Military Academy and Officer Candidate School (OCS), have enrollments that are regulated by military force requirements and are dictated by the Army's active end strength. ROTC is not constrained to these limitations and provides qualified officers to the total force, both Active and Reserves. Both OCS and West Point have prerequisite requirements that prescribe eligibility to attend their programs, but any able-bodied male or female can enroll in ROTC. The focus of this paper on just one pre-commissioning institution was

limited to ROTC and its ability to provide officers to not only the military force, but also to the civilian population if the cadet elects not to enter military service.

ROTC programs have successfully trained cadets for entry into the force since 1916. After World War II, the Army prepared for battle against the Soviet threat for over 40 years. After the Soviet decline in power, the focus of ROTC training shifted to supporting operational doctrine's emphasis on stability operations. Over the last twelve years, the center of training has been on counter insurgency operations inspired by missions in Iraq and Afghanistan. With less than a year away from the scheduled drawdown in Afghanistan, the military finds itself with no true peer in a multi-polar world. Without a peer competitor, the Army will shift focus to a wide range of security threats and ROTC programs will shift their training accordingly. The Chief of Staff of the Army, General Raymond Odierno insists, "In some circumstances [this] may require small teams of soldiers engaged in partnership activities, others might require the combined mass of brigades, divisions, and corps."6 Regardless the threat or location, the squad and small unit formation will remain the Army's foundation for future operations. To ensure their Soldiers are successful, small unit leaders must understand doctrine and apply its tenets.

Translating Ambiguous Doctrine

To understand and address the importance of small unit leadership, ADP 6-22 prescribes three basic attributes that all leaders should possess to be successful: Character, Presence, and Intellect.⁷ Very broad in nature, they speak to the core traits young officers should possess to lead Soldiers both in garrison and combat. Nested with operational doctrine as one of the eight elements of combat power⁸, leadership is a combat enabler.⁹ Character, Presence, and Intellect, provide the basic leadership

framework as the officer develops into a future strategic leader. A cadet has to have a clear understanding of how to apply the three attributes to real world situations for this evolution to take place. However, inexperienced military students may interpret these terms used in doctrine differently because they have various meanings.

The Army's latest refinement and republication of ADP 6-22 refocuses the Army to the human domain. This azimuth correction of leadership addresses how leaders present themselves in front of their troops and how they react to the environment around them. The three leadership attributes describe the core traits the Army requires in its leaders. *Army Leadership* articulates, "These attributes represent the values and identity of the leader (character) with how the leader is perceived by followers and others (presence), and with the mental and social faculties the leader applies in the act of leading (intellect)." All three attributes are difficult to achieve without practice, refinement, and an overall awareness of their effectiveness.

The first attribute, "Character", prescribes the code of conduct on how leaders live and interact with the society around them. As a doctrinal trait, character has four supporting competencies: Army Values, Empathy, Warrior Ethos, and Discipline. 11 Together, the Army requires these qualities to reside in the foundation of leadership. These underpinning morals and ethics define how leaders judge other people and are the point of reference from which they make decisions. However, a person's moral and ethical standards are not inherent at birth, but are developed through experience and refined by the environment in which they were raised. Cadets come to the ROTC programs from different economic, social, and cultural backgrounds. Each group defines their principals and standards slightly different. Due to the fact that some cadets where

raised differently and not to the standards prescribed in doctrine, requiring them to change their values will be as difficult to comprehend, as introducing the cadets to a foreign language. As difficult as it is for new cadets to comprehend these new values, it is equally difficult to achieve the traits prescribed in the doctrinal attribute of presence without conditioning and training.

"Presence" as defined in *Army Leadership* is the combination of military bearing, physical endurance, confidence, and resilience in recovering from adversity.¹² This attribute conveys a leader's outwardly appearance in front of subordinates and his¹³ self-confidence in dealing with leadership issues. Neither the attribute nor its supporting competencies can be achieved without training and practice. Building the confidence to make timely decisions and being comfortable leading troops comes only with experience. This is more than just wearing the rank; it takes a purposed effort to develop and the intellect to use self-control in inspiring subordinates to follow.

The last attribute prescribed by ADP 6-22 is "Intellect". Defined in doctrine, leaders with intellect should have mental agility, sound judgment, innovation, interpersonal tact, and expertise. ¹⁴ It is the leaders' ability to mentally dissect the situation and quickly make recommendations to resolve the problem. Leaders with intellect are innovative and use sound judgment in executing the commander's intent to achieving mission success. ¹⁵ As clear by its last supporting competency, intellect only comes after experience. Intellect, as well as Character and Presence, are difficult to achieve by inexperienced cadets without first understanding their core premise and then knowing how their application affects mission success.

The attributes of Character, Presence, and Intellect are overly complex in nature and require a high degree of understanding to achieve their principal doctrinal importance. Cadets must be taught how these core traits relate to other cornerstone documents such as Army Doctrine Publication 3-0, *Unified Operations*, so the traits can be developed and reinforced over the cadets' tenure in the ROTC program. The average maturity level and leadership experience a young adult possesses at entry into the pre-commissioning phase is somewhat limited.

Due to the cadet's inexperience and comprehension level, the format in which the attributes are taught is critical. It should be introduced in a format that can be easily digested and provide the structure for how the attributes are applied to the military environment. Character, Presence, and Intellect, coupled with each of their supporting sub-traits have to be taught in the simplest degree so inexperienced cadets gain a comprehensive prospective of their importance.

Keith Grint, in *The Arts of Leadership*, suggests his constructive approach to understanding leadership is more illustrative than scientific methodology and is simpler for the uneducated to understand. His model looks at how to apply different leadership styles as a persuasive technique rather than the directed approach the military defaults to using. Grint suggests the more broad the term used in describing the "how or why" a leader should react in a particular manner, the more difficult it is to be understood by someone who has never been in a leadership role. This lack of experience that Grint writes about, applies to the average ROTC cadet. Although the cadet's exposure to a coach, teacher, or boss may have generated an admiration that inspired them in some degree, few understand how to apply this leadership experience in their own practice.

Outside of any previous experience from organized sports or the few cadets with prior military service, they have little knowledge of how to apply leadership until they enter the pre-commissioning phase and start their military education. Appling leadership is more about influencing others, than it is about one particular human trait. Applying Grint's model of illustrative leadership, cadets should be shown various examples first for each attribute's characteristics, and then be given the opportunity to show how they could have been applied differently if placed in the same situation. This approach provides the cadet an understanding of "how" leadership is applied and they gain a greater appreciation for "why" it works better in different situations. The use of case studies or videos of theatrical movies are beneficial techniques for demonstrating both good and bad examples of these attributes.

Teaching the above "how and why" of leadership is difficult because the style of implementation differs with each person's approach. While the physical nature of two individuals may be similar, their mental capacity makes them different. What methods work well for one leader, may be difficult for another to figure out. The current ROTC teaching approach is to introduce all three leadership attributes as one topic and then require the cadets to demonstrate their proficiency on the subject by a written test. Cadets then receive an evaluation during their tenure to judge if they apply their teachings correctly. This may provide an adequate assessment of some cadets, but the true test results come during the application of their leadership skills. It could take several months before the "light comes on" for some students and they start practicing their teachings. ROTC instructors should address each of ADP 6-22's three attributes separately and assess each cadet's understanding of how they are applied. This more

accurate assessment can only take place if the instructor has a hands-on approach to teaching. The ancient classroom teaching style of lecture and written memorization testing will not provide an effective evaluation. It requires an adaptive teaching style of clearly presenting the attribute's characteristics, assessing if the student has an understanding of the attributes' application in a real world situation, and then evaluating the students' understanding through practical exercises before moving to the next subject. The assessment and evaluation steps of this style enable the instructor to grasp the students' comprehension of leadership application techniques, rather than their ability to recite ambiguous doctrinal terms. This adaptive teaching approach by the ROTC instructors is not only critical for non-experienced cadets to gain full perspective for the teaching, but also transitions the teaching environment to one that is more comfortable for the new generation of future officers to learn in.

Changing the Learning Environment

This new environment of teaching must use an adaptive learning approach that promotes critical thinking in a manner that is most acceptable by current and future cadets. How young adults learn and gain acceptance to new teachings is different from past analog instruction. Because the new generation of young adults takes full advantage of technology devices, they assess their surroundings and absorb information differently than past generations. In his writings, Dr Bob Johansen, suggests that children, who are less than 17 years old in 2012, have been so engrained in technology over their short life spans that they have become "digital natives." Dohansen's theory is that digital natives rely so heavily on technology that they would be lost if asked to step back into the analog society. Due to the fact they have grown up with advanced video games, smart phones, and instant access to information from the

global media, these devices have virtually become "appendages" of their mind. These devices also play a critical role in how young adults make decisions and learn about the society around them through access to virtual knowledge. For example, teenagers don't decide what they are hungry for by their craving, they use their smart phones to access social media sites like *Yelp or Twitter* that inform them of the most popular restaurants in their area. These "decision making appendages" have become so important to this generation that ROTC instructors need to harness these devices for their teaching. The older method of an hour-long "PowerPoint" lecture and antiquated printed textbooks must change. Instructors must adapt to the student and not expect the student to step back to their analog practices.

Using technology in their adaptive approach to learning, instructor' should integrate digital media into their teachings to promote greater learning by these digital natives. There are several ways digital media can be used to enhance learning, but the simplest is to start by putting all the prescribed reading into a digital format. This methodology enables students to virtually access their reading material from any location or from any one of the numerous technology devices (i.e. smart phones, tablets, or laptops) they so commonly use. In this format, embedded hyperlinks can provide instant examples or additional information about the topic reading. Most websites and online articles are starting to adapt the same practice, where the authors use standard writings to promote their thoughts, but provide embedded hyperlinks that take the reader to another online site that addresses the same line of thinking. The ROTC curriculum readings and lectures should us similar practices. This will require instructors to review the material regularly to ensure accuracy and relevancy. However,

through the commonly used "cloud"¹⁹ access, instructors have the ability to make updates to their syllabus virtually instantaneously. Additionally, technology equipped or "Smart" classrooms are required to provide access to the Internet so instructors can use the global media to enrich their teachings. Through sites like *YouTube* and *TED*, instructors can use the web to provide current situational awareness and add validity to their topics. This adaptive approach to classroom teaching, transforms the learning environment into a format that is logical for the digital native.

Johanson's digital natives learn differently than previous generations. They use games for not only entertainment, but for social access and as a creative outlet. The gaming philosophy is a low-end solution that ROTC instructors can use to enhance problem-solving skills and promote critical thinking. Games can be used to supplement the evaluation phase of student learning to assess if the cadets understand their teachings. Johansen suggests gaming will play an instrumental part of the future.²⁰ What Johansen is referring to is more than the video role-playing games of today, but games that are integrated into common activities like folding laundry or cooking a meal.²¹ These games will be motion-controlled "smart-games"²² superimposed on the activity by the use of contact lenses. Players are scored by how well they perform the real tasks that are interpreted by a heads-up display enabled by contact lenses. In the near future, four-dimensional (4D) alternate-reality games will emerge not only for entertainment, but also for training and problem solving tools. To illustrate the importance of games, Foldit, an online gaming site, uses a combination of science and entertainment for their problem solving games. While trying to solve one of many Foldit online puzzles, players uncovered the structure of a protein-cutting enzyme that was

critical to the reproduction of the acquired immune deficiency syndrome virus. Nature Structural & Molecular Biology published the first results of the game's success in their September 2011 journal.²³ The report expounded on how gamers²⁴ with practically limited knowledge of microbiology, solved the puzzle within three weeks from initially going online.²⁵ This monumental feat was something that scientists failed to resolve over the past 15 years in a lab.

Likewise, Steve Jones from United Parcel Service (UPS) describes the way his company uses video gaming to train their drivers on delivery as "immersive case studies." ²⁶ Utilizing games created by UPS, delivery drivers not only developed the skills to navigate the virtual busy streets of large cities, but also experienced issues associated with customer interaction during deliveries. ²⁷ Improvements in technology will give the user the visual sense of length, depth, and width, and will incorporate other senses like smell and taste. Improvement in automation and virtual reality games will create a greater thirst for technology by future cadets. These digital natives will have the ability to adapt quickly to technology advancements that have been stimulated from lifelong commercial improvements to high-tech products.

Johanson proposes, unlike the past 40 years where technology was pushed down from governmental research to consumers, new products will be closely tied to consumer development before entering into military use. "Innovation tends to [happen] bottom-up, fueled by consumer electronics, gaming..." ²⁸ and Johanson further suggests, "Now, the best ideas start in gaming and gradually spread back to the military and government." ²⁹ To maintain the attention of the new generation of cadets that have

grown up playing technology-driving games, ROTC programs will need to incorporate innovative role-playing games into their curriculum.

The Army has had great success by using games like America's Army as a recruitment tool. If the Army is to continue to entice and challenge digital natives, they will need to harness similar technology in their classrooms as well. The Army's Training and Doctrine Command's 21st Century Training uses a tool called Integrated Training Environment (ITE). The concept of ITE is to link live and virtual training together so Soldiers can execute decision making against future hybrid threats.³⁰ It provides a variety of complex scenarios so leaders can train under current and volatile, uncertain, complex and ambiguous (VUCA) conditions. This evolution in training provides the opportunity for leaders to make mistakes in a safe environment without loss of life or failed mission success.31 These training aides or games increase the confidence of the players by providing the opportunity to make mistakes virtually without fear of real world ramifications. Unfortunately, when a leader makes a mistake in real combat, it could affect the lives of their Soldiers, mission success, and possibly have strategic consequences on the Nation. These key factors associated with failure are what threaten the development of the "mission command" philosophy within the Army ranks.

The Importance of Mission Command for Future Officers

Lessons learned over the past decade of war in both Iraq and Afghanistan has driven the Army and the Joint community to refocus its practice of leadership and its contributions to decentralized operations. Experiences during these conflicts have shown that operations at the tactical level have an amplifying effect on the strategic level goals. This new methodology of decentralized operations is complemented in both Army and Joint doctrine by mission command. Mission command emphasizes

leadership as an "art" and challenges leaders at all levels to empower their subordinates.³² Like leadership, when applied correctly, it too is a combat multiplier and is addressed in operational doctrine as one of the eight elements of combat power.³³ Joint Publication 3.0, says for mission command to be successful it requires orders that have more clarity to purpose and endstate, rather than direct "how" a task should be preformed.³⁴ This approach to decentralized operations and mission command relies less on control and more on the art of command. The move towards mission command addresses terms like "empowerment" and "trust" that spell the end for past micromanagement control practices. Empowerment comes after a trust has been created between senior and subordinate leaders. This trust then matures and strengthens over time through counseling and feedback. It requires senior leaders to mentor and train their young officers to prevent a toxic relationship from developing.³⁵

Toxic relationships within military organizations will prevent mission command from reaching its true intention. Future leaders must appreciate that their actions not only have ramifications on their careers, but also have long-term effects on their organizations. ROTC instructors must instill in their cadets that trust is the foundation that bonds a unit together. A lack of trust between leaders and their subordinates create a toxic environment within the organization. In a 2010 survey sponsored by the Center for Army Leadership, it was noted that 20% of its respondents saw their superior as being toxic and unethical.³⁶ This is an alarming number; however, each member within an organization should have the integrity and personal courage to identify when their leadership is destroying the virtues of the unit. The Army has several methods that are available for subordinates to report poor leaders. Cadets must understand what each of

these processes are, but also be able to recognize the difference between a tough leader and a toxic leader. Many young leaders mentally struggle with differentiating between expressing loyalty to their chain-of-command and identifying a leader that has total disregard of his power. The difference in the two is monumental, but for young officers that have never experienced the two it is hard to comprehend.

In her research, *Generation Me*, Dr. Jean M. Twenge, suggests the current generation of young adults believe even if they speak out on their beliefs, it will have no value in making change.³⁷ The lack of trust in their leaders, compounded by their disregard for subordinates, is a recipe for destruction. Therefore, it is important for ROTC instructors to instill in their cadets that they can make a difference and their actions have strategic importance. To make changes within the organization or to the operational environment, these future officers must develop critical thinking skills and effective problem solving skills.

The former Director for Defense Advanced Research Projects Agency, Regina Dugan, feels the primary issue leaders have with problem solving is the fear of failure.³⁸ Johanson expounds on this philosophy by saying "leaders have to learn how to fail and then try again."³⁹ For future leaders to develop critical thinking skills and adaptive problem solving proficiency, they first must understand that the problem is more difficult than the answer. Too often, young leaders delay in taking action because they are afraid of making mistakes. They are indecisive because they are looking for the perfect solution, whereas the problem may be so complex there is not a correct answer. As General George Patton so eloquently stated, "a good plan, violently executed now, is better than a perfect plan next week."⁴⁰ Adaptive problem solving is about

understanding the problem, developing a course of action, and then reacting to the solution. Training in this manner is also complex, because the instructor has to be creative in generating the problem that will challenge the creativity of the cadet and still show the student understands how to apply the subject. The instructor must understand he may not get the perfect textbook answer every time, but he must evaluate if the student has sound logic behind his answer. At that point, the instructor can truly understand if the future officer can apply his teachings to real-world situations. The current ROTC curriculum addresses key fundamentals for young officers. However, for mission command to take hold in future ideology, leaders must trust their subordinates to logically assess the current problem and make critical decisions that follow their given intent. Mission command is a solid concept that enables a leader and his unit to succeed in a VUCA environment. However, it is not an Army-centric concept. Mission command becomes much more powerful when the entire joint community adopts it.

The Chairman, Joint Chiefs of Staff (CJCS), *Capstone Concepts for Joint Operations*, prescribes a new, globally postured force that comes together to form a Joint Force that enables Mission Command across all domains. ⁴¹ This document refers to the emerging strategy of a "Globally Integrated Operations." ⁴² It envisions harnessing each of the services strengths together as a single force. This force would collaborate with allies to achieve regional stability. ⁴³ The Globally Integrated Operations model capitalizes on the successes achieved at the Joint Task Force level and extends the same principals to a much smaller force structure. To ensure new officers are prepared for this environment they must have a greater depth of understanding of the capabilities their sister services bring to the fight. Training on joint operations from pre-

commissioning through general officer is conducted in accordance with the Chairman, Joint Chiefs of Staff Instruction (CJCSI) 1800.01D.⁴⁴ This continued education through the Joint Professional Military Education (JPME) process is prescribed by law and dictates all officers must have joint experience before becoming a "flag officer." New doctrine suggests these joint experiences will occur earlier in an officer's career. Joint integration once predicted at the Major level is now probable at the Lieutenant level. Young leaders could find themselves planning for a joint operation without an available service subject matter expert. This will require future officers to have a greater understanding of the affects and capabilities their sister services provide to the operation. JPME provides the roadmap for instruction and proficiencies an officer must receive at a giving level or rank in his career.

To promote mission command and develop a greater proficiency for combined operations, future officers will need earlier instruction on Joint, Interagency, Intergovernmental, and Multinational (JIIM) interoperability in the JPME process. 46 This interdependency on JIIM contributions at the tactical and operational levels war changes mythology previously thought. Because of the complications of JIIM interoperability, it challenges the application of command and control at all levels of leadership. Officer Professional Military Education Policy (OPMEP) dictates CJCS' objectives and a policy concerning the depth of joint training officers receive at a particular grade. Furthermore, it prescribes which professional military education (PME) course (school) conducts the particular JPME training. 47 OPMEP requires sister service capabilities to be taught as part of the primary or entry-level training, after completing ROTC. Typically, these courses do not go into great depth due to limited time and

resources. On average, most primary courses only provide a "PowerPoint" presentation and move to the next subject. With the exception of the general officer learning objectives, some elements of the JPME curriculum can be instructed earlier in an officer's PME. Subjects prescribed by OPMEP taught at the primary courses, should be a part of instruction during the pre-commissioning phase. This would provide a higher degree of joint exposure in advance of that which is prescribed in CJCSI 1800.01D. In addition to teaching joint exposure earlier in the PME cycle, many colleges and universities provide opportunities for joint integration at the ROTC level.

ROTC programs, like the University of South Florida and University of Nebraska-Lincoln, have already started combining multi-service resources at the campus level. These programs share building space, classrooms, ranges, and other resources to promote a Joint ROTC learning community setting. Other colleges and universities that offer more than one service ROTC should implement this efficiency model. "Crosspollination" would not only occur during the weekly lab lessons where cadets apply classroom instruction to practice, but during other academic studies as well. Not all universities provide multi-service ROTC programs, but at the campuses that do, the pool of resources provide a superior joint learning environment for the cadet. This proposed change should not affect the interservice transfer rules each service has applied to commissioning requirements. Cadets or midshipmen would still enter the service they enrolled under as expected. However, this possible change would affect the various senior faculty service professors at the joint programs.⁴⁸ Each service would not only share training responsibilities for their students at the college or universities, but also rotate senior faculty duties across the participating schools. For universities and colleges that do not have another service program on their campus, inter-service instructors support could be shared within in the general area. This would provide quality education on sister service capabilities and present the cadets with a greater level of joint exposure possibly not experienced until their first deployment. In a pending time of uncertain budgetary constraints, these changes would enable the services to share resources so they can continue to produce the best and brightest junior officers.

Conclusion

The Nation's security environment is constantly changing. The military must continue evolving to keep up. The Army must continue to adjust its formations, policies, and doctrine to create a culture that embraces the challenges of an increasingly complex and uncertain security environment. ⁴⁹ What will not change is the importance of leadership when applied to the human domain. The leadership attributes addressed in ADP 6-22, Character, Presence, and Intellect speak to the human domain. ADP 6-22 is only one of three doctrine manuals the Chief of Staff of the Army personally signs. When General Odierno signed this document in August 2012, he penned the principals of how the Army as a profession will mature its leadership to face the challenges of a future volatile, uncertain, complex, and ambiguous security environment. General Martin E. Dempsey, eighteenth Chairman of the Joint Chiefs of Staff, says, "Leadership is the foundation that strengthens our profession of arms." The cornerstone of leadership is the leader's ability to motivate and influence people both in and out of uniform.

Leaders, at all levels, will not only have to understand this basic framework required to establish productive cooperation, but also quickly adapt to the surrounding environment. This adaptation comes from cultural awareness, human understanding, and innovative negotiation skills. The Army must continue its investments in the

institutions and its leaders so they can advance the operational force to members of a globally integrated, unified, joint force of tomorrow.

ROTC institutions have been successful in developing military leaders for almost 100 years. However, changes in doctrine and the impacts from a VUCA world will cause a review of the current curriculum. Future changes in this curriculum must include teaching cadets a clear appreciation of ambiguous doctrinal terms and build a comprehensive acceptance of mission command so they have a greater depth of knowledge and leadership skills required for entering the operational force. This will assist in shortening the time newly commissioned officers have to gain experience before leaving their posts, camps, or stations on their first deployment. To ensure instructors maintain the full attention of the technology minded new generation of cadets, teaching habits and classroom facilities must adapt to these digital natives and not expect them to learn in an analog environment. This means a combination of sharing resources and harnessing technology to challenge future digital natives so they are prepared to enter the force in a time of growing uncertainty. For these cadets, the future will most certainly mean entering a force that is drawing down its ranks, under budget constraints, and prepared to defend the Nation against an uncertain world where radical actors want to make their presence known on the geopolitical stage. The military will ask more of its future leaders and the complexity of the global environment will mean they will need to be ready for a wide range of possible scenarios.

Endnotes

¹ U.S. Air Force, The Air University, Leadership, Ethics & Command Central, http://www.au.af.mil/au/awc/awcgate/usmc/leadership_guide.pdf, (accessed November, 12 2012).

- ² John Tirman, Why Do We Ignore the Civilians Killed in American Wars, The Washington Post, January 06, 2012,
- http://articles.washingtonpost.com/20120106/opinions/35439668_1_civilian-deaths-wars-three-year-conflict (accessed November 12, 2012).
- ³ U.S. Department of the Army, *Army Leadership*, Army Doctrine Publications 6-22 (ADP 6-22) (Washington, DC: U.S. Department of the Army, August 14, 2012), Forward.
- ⁴ U.S. Army Cadet Command, The Official home of Army ROTC, History, http://www.cadetcommand.army.mil/history.aspx (accessed February 23, 2013).

- ⁶ Raymond T. Odierno, CSA's Strategic Intent: Delivering Strategic Landpower in an Uncertain World, Washington, DC, February 5, 2013, http://www.army.mil/article/95729/ (accessed February 23, 2013).
 - ⁷ ADP 6-22. 5.
- ⁸ ADP 3.0's eight elements of combat power are leadership, information, mission command, movement and maneuver, intelligence, fires, sustainment, and protection.
- ⁹ U.S. Department of the Army, *Unified Land Operations*, Army Doctrine Reference Publications 3.0 (ADRP 3.0) (Washington, DC: U.S. Department of the Army, May 16, 2012), 3-2.
- ¹⁰ U.S. Department of the Army, *Army Leadership*, Army Doctrine Reference Publications 6-22 (ADP 6-22) (Washington, DC: U.S. Department of the Army, September 12, 2012), 1-5.

- ¹⁸ Bob Johansen, *Leaders Make the Future: Ten New Leadership Skills for an Uncertain World*, (San Francisco, CA: Berrett-Koehler, 2012), 11.
- ¹⁹ "Cloud" is the commonly used term in defining cloud access or cloud computing. It is the collective power of thousands of computers, enabled by the internet, that provide access to news, music, movies, shopping and allows users to store files on the web.

⁵ Ibid.

¹¹ Ibid., 3-1.

¹² Ibid., 4-1.

¹³ For simplicity of reading, "His" and "he" is used for both male and female gender.

¹⁴ ADRP 6-22, 5-1,

¹⁵ ADP 6-22, 7,

¹⁶ Keith Grint, *The Arts of Leadership*, Oxford University Press (New York: NY, July 12, 2001), 4.

¹⁷ Ibid., 4.

- ²⁰ Johansen, 82.
- ²¹ Josh Hunt, *Video Games of the Future*, The Futurist, http://thefuturist.co/video-games-of-the-future (accessed 26 February 2013).
- ²² Motion-controlled games are interactive games that mimic a person's movement without the use of a standard controller. Smart Games automatically recognize the player, the environment, and superimposes the game onto the real world background.
- ²³ Michael J. Coren and Fast Company, Foldit Gamers Solve Riddle of HIV Enzyme within 3 Weeks, Scientific American, http://www.scientificamerican.com/article.cfm?id=foldit-gamers-solve-riddle, (accessed November 12, 2012).
- ²⁴ A "Gamer" typically refers to the physical player that is interacting with a video or role-playing game.
- ²⁵ "Online" refers to the publication, posting, or access to information by an individual on the world wide web.
 - ²⁶ Johansen, 82.
 - ²⁷ Ibid., 82.
 - ²⁸ Ibid., 143.
 - ²⁹ Ibid., 143.
- ³⁰ Army Training and Doctrine Command, www.TRADOC.Army.mil, 21st Century Training, http://www.tradoc.army.mil/ (accessed January 26, 2013).
- ³¹ Colonel Mike Lundy, Military Training Technology, Army Debuts the Integrated Training Environment, http://www.military-training-technology.com/mt2-home/429-mt2-2012-volume-17-issue-6-september/5862-army-debuts-the-integrated-training-environment.html (accessed December 10, 2012).
 - ³² ADRP 3.0, 2-10.
 - ³³ Ibid., 1-9.
- ³⁴ U.S. Joint Chiefs of Staff, *Joint Operations*, Joint Publication 3-0 (Washington, DC: U.S. Joint Chiefs of Staff, March 22, 2010), II-2.
 - ³⁵ ADRP 6-22, 1-3.
- ³⁶ Center for Army Leadership, CASAL: Army Leaders' Perceptions of Army Leaders and Army Leadership Practices Special Report 2011-1, June 2011. http://usacac.army.mil/CAC2/Repository/CASAL_ParticipantFeedback_2011_1.pdf (assessed October 14, 2012), 12.
 - ³⁷ Dr Jean M. Twenge, *Generation Me*, (New York, NY: Simon & Schuster, 2006), 137.

³⁸ Regina Dugan, TED Conferences, LLC, Regina Dugan: From mach-20 Glider to Humming Birds Drone, posted:Mar 2012, http://www.ted.com/talks/regina_dugan_from_mach_20_glider_to_humming_bird_drone.html (accessed November 10, 2012).

³⁹ Johansen, 143.

⁴⁰ General George S. Patton, Jr., The Official Website of General George S. Patton, Jr., Estate of General George S. Patton Jr., http://www.generalpatton.com/quotes/index.html (accessed January 12, 2013).

⁴¹ Chairman, Joint Chiefs of Staff, *Capstone Concept for Joint Operations: Joint Forces 2020*, (CCJO) (Washington, DC: U.S. Joint Chiefs of Staff, September 10, 2012), Forward.

⁴² Ibid., 4.

⁴³ Ibid., 4.

⁴⁴ U.S. Joint Chiefs of Staff, *Officer Professional Military Education Policy (OPMEP)*, Chairman Joint Chiefs of Staff Instruction 1800.01D – Change 1 (Washington, DC: U.S. Joint Chiefs of Staff, December 15, 2011), Appendix B to Enclosure E.

⁴⁵ Generals and Admirals are commonly referred to as "Flag Officers." At the promotion to these ranks, they receive a personal flag that denotes their star level. The flag is displayed when they are present and performing their military duties.

⁴⁶ CCJO, 8.

⁴⁷ U.S. Joint Chiefs of Staff, *Officer Professional Military Education Policy (OPMEP)*, Chairman Joint Chiefs of Staff Instruction 1800.01D – Change 1 (Washington, DC: U.S. Joint Chiefs of Staff, December 15, 2011), Enclosure A.

⁴⁸ Each ROTC program has a senior officer from their service designated as the professor of studies. Their titles are slightly different by the service they represent. They are: Army: Professor of Military Studies (PMS); Navy: Professor of Naval Science (PNS); Air Force: Professor of Aerospace Studies (PAS).

⁴⁹ U.S. Department of the Army, *The Army*, Army Doctrine Publications 1 (Washington, DC: U.S. Department of the Army, November 7, 2012), 4-13.

⁵⁰ Martin E. Dempsey, America's Military - A Profession of Arms White Paper (Washington, DC: Joint Staff Pentagon, n.d.) http://www.jcs.mil/content/files/2012-02/022312120752_Americas_Military_POA.pdf (accessed October 22, 2012), 3.